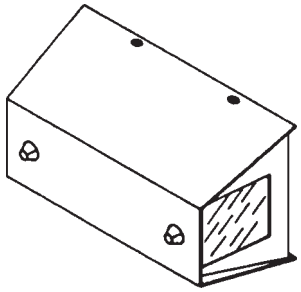

HS3000/HS3020 High-Security Enclosures

Installation/ Operation Manual

C483M-E (9/97)

Pelco • 3500 Pelco Way, Clovis, CA 93612-5699 • USA • www.pelco.com
In North America and Canada: Tel (800) 289-9100 • FAX (800) 289-9150
International Customers: Tel (1-559) 292-1981 or FAX (1-559) 348-1120

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REVISION HISTORY

Manual #	Date	Comments
C483M	8/89	Original manual, created for AH3000.
C483M	6/90	Rev. A. Manual revised/updated to reflect model number change to HS3000.
C483M	5/91	Rev. B. Manual design revised.
C483M	12/91	Rev. C. Manual revised to reflect new HS3020 model information, revised dimension drawing and revised parts list.
C483M-D	9/95	Rev. D. Manual revised to include optional tamper switch installation information; as well as new mounting template and manual style.
C483M-E	2/96	Rev. E. Revised to include updated specification description, installation instructions, and part numbers for tamper switch update per ECO# 95-357.
	9/97	Revised manual to new format. Added Tables A and B. Added HS3020CA to list of options.

1.0 GENERAL

1.1 IMPORTANT SAFEGUARDS AND WARNINGS

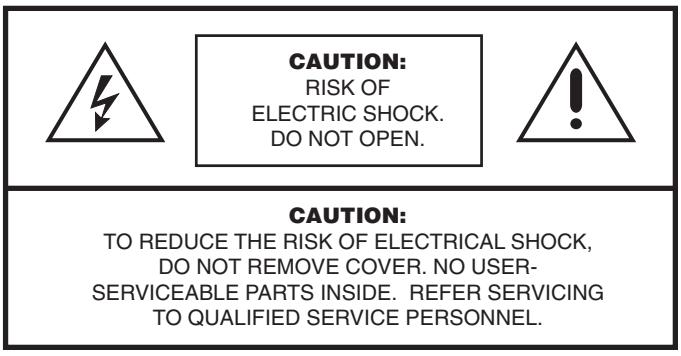
Prior to installation and use of this product, the following WARNINGS should be observed.

1. Installation and servicing should only be done by Qualified Service Personnel and conform to all Local codes.
2. Unless the unit is specifically marked as a NEMA Type 3, 3R, 3S, 4, 4X, 6, or 6P enclosure, it is designed for indoor use only and it must not be installed where exposed to rain and moisture.
3. Only use replacement parts recommended by Pelco.
4. The installation method and materials should be capable of supporting four (4) times the weight of the enclosure, camera and lens combination.
5. The camera and lens combination shall not exceed 40 lbs (18 kg).

The product and/or manual may bear the following marks:

This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.

1.2 UNPACKING INSTRUCTIONS

Unpack and inspect all parts carefully.

The following parts are supplied:

1	Camera enclosure
1	1/4"-drive socket for tamper-resistant screws
1	7/64" Allen wrench
2	1/4-20 x 1/2" bolts
2	1/4" flat washers
2	1/4" split lock washers

Be sure to save the shipping carton and any inserts. They are the safest material in which to make future shipments.

If an item appears to have been damaged in shipment, replace it properly in its carton and contact the factory at 1-800-289-9100 or 1-559-292-1981 for a replacement. (International customers fax 1-559-348-1120 for authorization and instructions.)

If an item needs to be returned to the factory for repair, consult the WARRANTY AND RETURN section of this manual for instructions.

1.3 RECOMMENDED TOOLS

Pelco does not supply basic tools needed for the installation process. The following tools are recommended:

Hand tools
Drill
Coaxial cable stripper
BNC crimp tool
Wire cutter
Wire stripper

2.0 DESCRIPTION

The HS3000 Series is a high security camera enclosure designed for installations such as ATM bank machines, prisons, detention cells, etc., requiring maximum protection from vandalism. In addition, a factory-installed tamper switch is mounted on the secured access cover.

Constructed from heavy-gauge steel, the HS3000 Series will accept most CCD cameras with fixed focal length lenses ranging in size from 4mm to 75mm. There is no exposed mounting hardware securing the HS3000 Series to its mounting surface. Opening the enclosure can only be accomplished with a specially designed tool, eliminating the possibility of the enclosure being opened by unauthorized personnel. Designed to function as a wall or ceiling enclosure, the HS3000 Series features two possible window positions. An impact-resistant, .25" (.63 cm) thick, smoked Lexan™ window is supplied with the enclosure.

2.1 MODELS

HS3000	Medium sized, high-security camera enclosure, 10" (25.4 cm) body.
HS3020	Same as HS3000 except 20" (50.8 cm) body.

2.2 OPTIONS

AH300010025	Window, clear, .25" (.63 cm) thick Lexan™.
HKHS3000	Heater kit, 120 VAC, 30 watts. Thermostatically controlled ON at 40°F (4.44°C) and OFF at 60°F (15.56°C).
HKHS3024	Same as HKHS3000 except 24 VAC.
HS3020CA	Conduit adapter for HS3020.

3.0 INSTALLATION

Before installing the HS3000/HS3020 to a wall or ceiling, make certain that the mounting surface is able to support four times the full load of the enclosure plus all other equipment such as camera, lens, etc.

To mount the enclosure to a wall or ceiling, follow the steps outlined below.

1. Unscrew the screws and remove the cover using the special socket (fits 1/4" drive) and Allen wrench that are provided.
2. Knock out any of the three (3) cable entry holes desired on the enclosure body.
3. Mark and drill four (4) holes in the wall or ceiling for mounting the enclosure and, as required, holes for cabling (see Figure 2 dimension drawing).
4. Attach the enclosure with the required fasteners.
5. Route all cables through the appropriate knockouts. Refer to Table A for the type of video coaxial cable to use. If your camera will use 24 VAC power, refer to Table B to determine the size of wire to use. If you are using conduit, attach it to the enclosure.
6. The tilt table consists of two (2) L-brackets. If the enclosure is mounted to a wall, remove the outer L-bracket.
7. Loosen the tilt table mounting bolt.
8. Securely attach the camera/lens to the desired location on the tilt table using the bolts, flat washers and split lock washers that are provided.
9. Make all necessary electrical connections (video, camera power, etc.).
10. Wire the tamper switch. For a “Normally Open” circuit, use the “NO” and “common” terminals; for a “Normally Closed” circuit, use the “NC” and “common” terminals. Remember that the switch will be pushed down when you replace the cover.
11. Position the tilt table at the desired location and angle, and tighten the hardware.
12. Replace the cover.
13. Provide power to the camera and check for adequate video image.

NOTE: *The four (4) fasteners required to secure the enclosure to a wall mounting surface (minimum 3/8" [.952 cm] diameter recommended) are not supplied.*

Table A. Video Coaxial Cable Wiring Distances

Cable Type*	Maximum Distance
RG59	750 ft (229 m)
RG6	1,000 ft (305 m)
RG11	1,500 ft (457 m)

* Minimum cable requirements:
75 ohms impedance
All-copper center conductor
All-copper braided shield with 95% braid coverage

Table B. 24 VAC Wiring Distances

The following are the recommended maximum distances for 24 VAC applications and are calculated with a 10-percent voltage drop. (10-percent is generally the maximum allowable voltage drop for AC-powered devices.)

EXAMPLE: *An enclosure that requires 80 vA and is installed 35 feet (10 m) from the transformer would require a minimum wire gauge of 20 Awg.*

NOTE: *Distances are calculated in feet; values in parentheses are meters.*

Wire Gauge

Total vA consumed	22	20	18	16	14	12	10
10	178 (54)	283 (86)	451 (137)	716 (218)	1142 (348)	1811 (551)	2880 (877)
20	89 (27)	141 (42)	225 (68)	358 (109)	571 (174)	905 (275)	1440 (438)
30	59 (17)	94 (28)	150 (45)	238 (72)	380 (115)	603 (183)	960 (292)
40	44 (13)	70 (21)	112 (34)	179 (54)	285 (86)	452 (137)	720 (219)
50	35 (10)	56 (17)	90 (27)	143 (43)	228 (69)	362 (110)	576 (175)
60	29 (8)	47 (14)	75 (22)	119 (36)	190 (57)	301 (91)	480 (146)
70	25 (7)	40 (12)	64 (19)	102 (31)	163 (49)	258 (78)	411 (125)
80	22 (6)	35 (10)	56 (17)	89 (27)	142 (43)	226 (68)	360 (109)
90	19 (5)	31 (9)	50 (15)	79 (24)	126 (38)	201 (61)	320 (97)
100	17 (5)	28 (8)	45 (13)	71 (21)	114 (34)	181 (55)	288 (87)
110	16 (4)	25 (7)	41 (12)	65 (19)	103 (31)	164 (49)	261 (79)
120	14 (4)	23 (7)	37 (11)	59 (17)	95 (28)	150 (45)	240 (73)
130	13 (3)	21 (6)	34 (10)	55 (16)	87 (26)	139 (42)	221 (67)
140	12 (3)	20 (6)	32 (9)	51 (15)	81 (24)	129 (39)	205 (62)
150	11 (3)	18 (5)	30 (9)	47 (14)	76 (23)	120 (36)	192 (58)
160	11 (3)	17 (5)	28 (8)	44 (13)	71 (21)	113 (34)	180 (54)
170	10 (3)	16 (4)	26 (7)	42 (12)	67 (20)	106 (32)	169 (51)
180	9 (2)	15 (4)	25 (7)	39 (11)	63 (19)	100 (30)	160 (48)
190	9 (2)	14 (4)	23 (7)	37 (11)	60 (18)	95 (28)	151 (46)
200	8 (2)	14 (4)	22 (6)	35 (10)	57 (17)	90 (27)	144 (43)

Maximum distance from transformer to load

4.0 MAINTENANCE

Regularly scheduled maintenance will help prolong the operational life and appearance of the equipment.

Clean the plexiglass viewing window regularly with a soft cloth, using a mild, non-abrasive detergent and water solution to help maintain picture clarity.

5.0 EXPLODED ASSEMBLY DRAWING

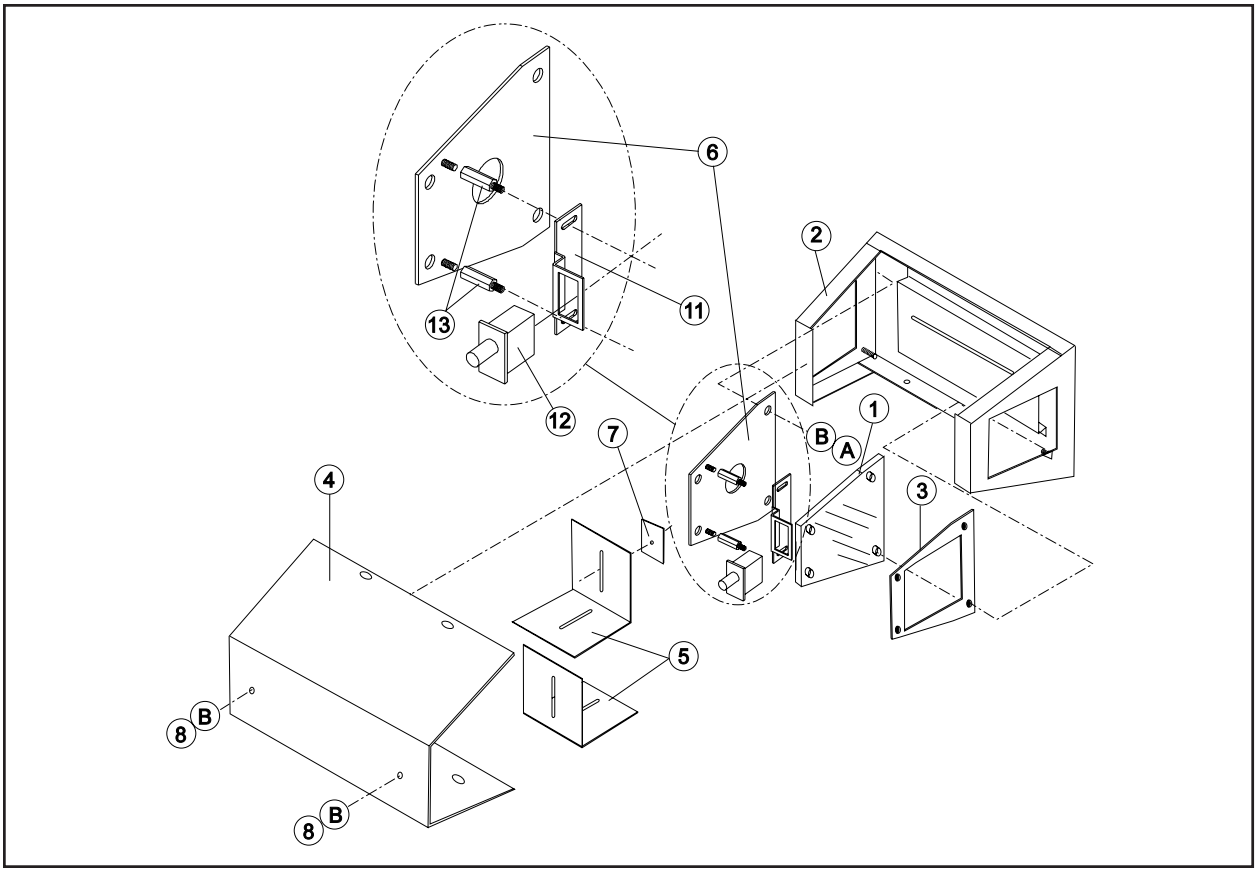


Figure 1. HS3000/HS3020 Exploded Assembly Drawing

Table C. HS3000/HS3020 Exploded Assembly Parts List

Item	Quantity	Description	Part Number
1	1	Window, Lexan™, smoked	AH300010005
2	1	Body (HS3000)	AH30001000WA
		(HS3020)	HS30201000WA
3	2	End plate gasket	AH300010015
4	1	Cover (HS3000)	AH30004002COMP
		(HS3020)	HS30204002COMP
5	2	Tilt table	AH30004004COMP
6	1	Rear plate	AH30004005COMP
7	1	Tilt table lock plate	AH30004006COMP
8	2	Tamper-resistant screw	ZH1/4-20X.50SRT
9	1	Socket tool for tamper-resistant screw	ZTSOCKET10
10		Body gasket (feet)	
	5	HS3000	EH550010030
	10	HS3020	EH550010030
11	1	Tamper switch bracket	HS30004113COMP
12	1	Tamper switch	SWI1DM401
13	2	Spacer (stand-off)	SPA800IL

6.0 SPECIFICATIONS

MECHANICAL

Window:	1/4" (.63 cm) thick, impact and abrasion resistant smoked Lexan™ (1 f-stop attenuation)
Camera Mounting:	Adjustable tilt table
Enclosure Mounting:	Four (4) .390" (.99 cm) diameter holes on protected rear surface
Maximum Camera/Lens Size	Accepts camera/lens combinations (including BNC connector) up to:
HS3000	3.75" H x 3.25" W x 9.00" L (9.52 cm x 8.25 cm x 22.86 cm)
HS3020	3.75" H x 3.25" W x 18.00" L (9.52 cm x 8.25 cm x 45.72 cm)
Security:	Tamper-resistant screws and N.O./N.C. switch contact on cover
Tamper Switch:	Plunger type door switch with "pull to cheat" feature. N.O./N.C. contacts clearly marked on body of switch.
DM electrical rating:	10A, 125V. Plunger type with .20" (0.51 cm)

ELECTRICAL

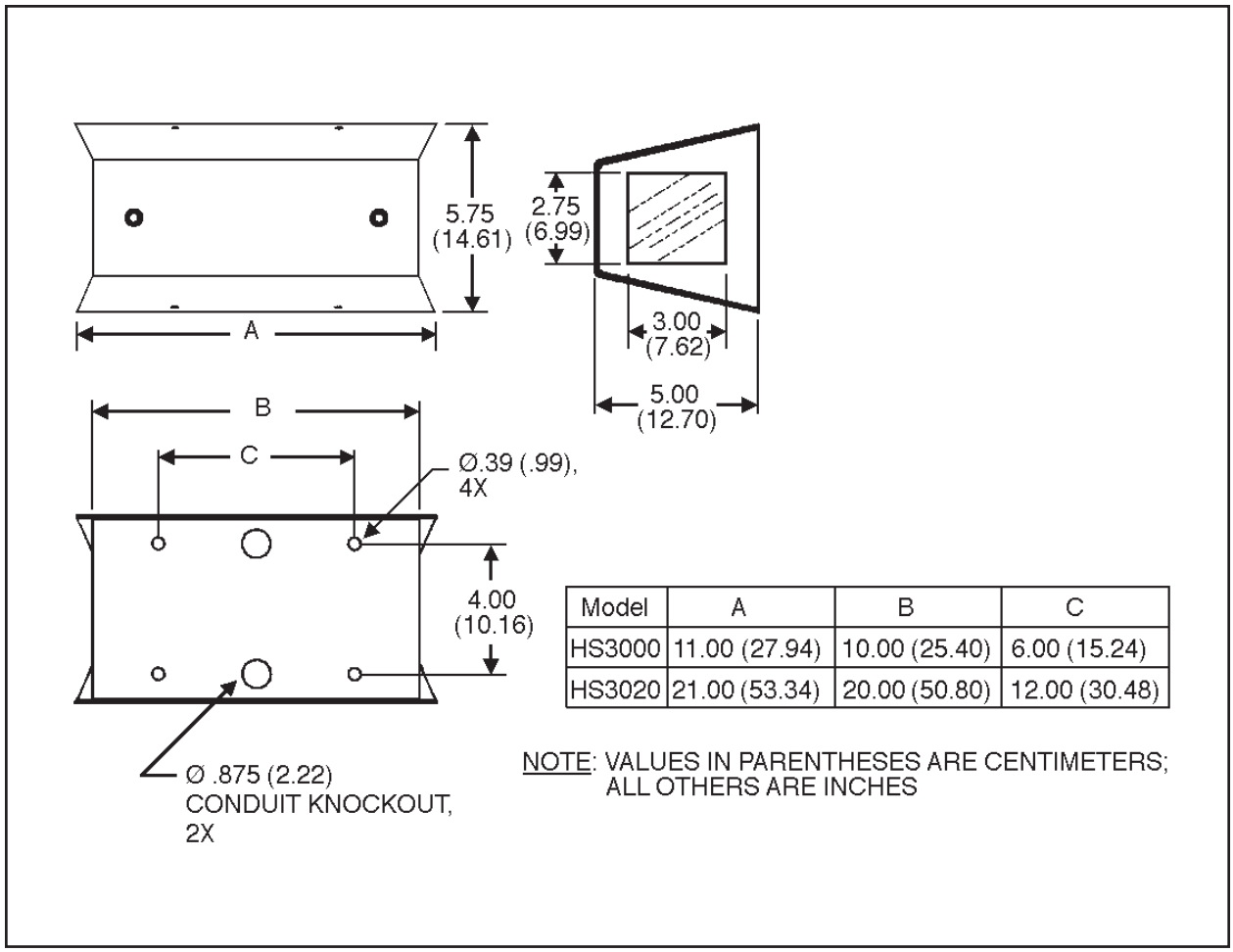
Cable Entry:	Two (2) cable knockout holes on flat mounting surface
	One (1) cable knockout hole on the end opposite the viewing window
	Knockouts are Ø.875-inch (2.22 cm) and will accept 1/2-inch (1.27 cm) conduit
Tamper Switch:	1/4" (.63 cm) quick connect. N.O./N.C. clearly marked on switch body. 10A, maximum switching current 125V, maximum switching voltage.

GENERAL

Construction:	Seam welded 14 GA (.074") steel
Finish:	Polyester powder coat
Security:	Two (2) tamper-resistant screws
Weight:	
HS3000:	8 lbs (3.6 kg)
HS3020:	16 lbs (7.2 kg)
Dimensions:	See Figure 2

(Design and product specifications subject to change without notice.)

This equipment contains electrical or electronic components that must be recycled properly to comply with Directive 2002/96/EC of the European Union regarding the disposal of waste electrical and electronic equipment (WEEE). Contact your local dealer for procedures for recycling this equipment.



Model	A	B	C
HS3000	11.00 (27.94)	10.00 (25.40)	6.00 (15.24)
HS3020	21.00 (53.34)	20.00 (50.80)	12.00 (30.48)

NOTE: VALUES IN PARENTHESES ARE CENTIMETERS; ALL OTHERS ARE INCHES

Figure 2. HS3000/HS3020 Dimension Drawing

7.0 WARRANTY AND RETURN INFORMATION

WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship for a period of one year after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on FT/FR8000 Series fiber optic products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra®, Esprit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 Series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair).

All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid. Ship to the appropriate address below.

If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:

Service Department
Pelco
3500 Pelco Way
Clovis, CA 93612-5699

If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco
3500 Pelco Way
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors
473 Eccles Avenue
South San Francisco, CA 94080 USA
Phone: 650-737-1700
Fax: 650-737-0933

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